

# PATENT ABSTRACTS OF JAPAN

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(21)Application number : **59-239962** (71) **RICOH CO LTD**

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## (54) THERMAL RECORDING MATERIAL

### (57)Abstract:

**PURPOSE:** To obtain a thermal recording material having high coloring sensitivity and improved head matching property as well as free of ground fogging by adding silica or silica-calcium carbonate composite having a specific surface area of 150m<sup>2</sup>/g or less and an oil absorption of 100ml/100g or more, as fillers, to an under layer and a thermal color-forming layer.

**CONSTITUTION:** A silica-calcium carbonate composite, which is prepared from coprecipitation by blowing CO<sub>2</sub> gas into an aqueous solution of sodium silicate and calcium chloride or calcium hydroxide and is considered to be a combination of silica and calcium carbonate in molecular states, has a specific surface area of 100m<sup>2</sup>/g or less, or a lower activity, which serves to refuse the occurrence of ground fogging. The silica-calcium carbonate composite has an oil absorption of 150ml/100g or more which serves to raise a head matching property. The composite may be used in combination with various fillers in general use for under-layer or thermal color-forming layer.